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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,596	12/08/2003	Yasuhiro Nose	NOSE ET AL I	2132
25889	7590	06/17/2004	EXAMINER	
WILLIAM COLLARD COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			ZARROLI, MICHAEL C	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/730,596	<b>Applicant(s)</b> NOSE ET AL.	
	<b>Examiner</b> Michael C. Zarroli	<b>Art Unit</b> 2839	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9,12,14,15 and 18 is/are rejected.
- 7) ☒ Claim(s) 6,10,11,13,16 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____.   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/8/03</u> .   | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Double Patenting***

2. Applicant is advised that should claim 1 be found allowable, claim 3 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Soga et al.

Soga discloses a connector comprising an insulator (30a, 30b) to be mounted on one surface of a board (40), and a conductive contact (14) retained by said insulator (fig. 2), said contact including a terminal portion (unnumbered fig. 2) extending outward from a one-side surface of said insulator so as to be connected to said board (fig. 3), wherein said terminal portion comprises a first portion (unnumbered in fig. 2) extending outward from said one-side surface of said insulator so as to be substantially parallel to said one surface of said board when said insulator is mounted on said one surface of said board (fig. 3), a second portion (18b) bent to extend so as to be connected to said board when said insulator is mounted on said one surface of said board, and a third portion (18c) joining between said first and second portions in a predetermined position spaced apart from said one-side surface of said insulator, said second portion is bent using a joining portion between said second and third portions as a fulcrum (22b), and said third portion is bent using, as a fulcrum (22a), a joining portion between said first and third portions so as to be away from said one surface of said board in a direction from said fulcrum at said joining portion between said first and third portions toward said fulcrum at said joining portion between said second and third

portions when said insulator is mounted on said one surface of said board (figures 2 & 3).

Regarding claims 2 and 4 Soga discloses that the second portion is bent perpendicularly relative to said first portion.

Regarding claim 5 Soga discloses that said one-side surface of said insulator is formed with a projection (30b) in the neighborhood of said first portion on a side near said one surface of said board.

### ***Claim Rejections - 35 USC § 103***

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7-9, 12, 14-15 and, 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Soga et al in view of Saito.

Soga discloses an insulator (30a, 30b) to be mounted on one surface of a board (40), and a conductive contact (14) retained by said insulator (fig. 2), said contact including a terminal portion (unnumbered fig. 2) extending outward from a one-side surface of said insulator so as to be connected to said board (fig. 3), wherein said terminal portion comprises a first portion (unnumbered fig. 2) extending outward from said one-side surface of said insulator so as to be substantially parallel to said one surface of said board when said insulator is mounted on said one surface of said board (fig. 3), a second portion (18b) bent to extend so as to be connected to said board when said insulator is mounted on said one surface of said board, and a third portion (18c) joining between said first and second portions, said method comprising the steps of: bending, after retaining said contact by said insulator, said second portion using a joining portion between said second and third portions as a fulcrum (22b) from a shape in which said second and third portions

extend in the same direction as said first portion, so that said second portion is connected to said board; and bending said third portion at a joining portion between said first and third portions as a fulcrum (22a) so as to be away from said one surface of said board in a direction toward said fulcrum at said joining portion between said second and third portions when said insulator is mounted on said one surface of said board (figures 2 & 3).

Soga does not specifically recite the use of bending tools to form the portions of the contact.

Saito discloses two bending tools (51, 52) used to bend at fulcrums three portions of a contact (figures 5 & 6).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the bending tools of Saito to form the three portions of the contact of Soga. The motivation/suggestion for doing so would have been to form the contact on an assembly line setup as described by Saito. It is also hard to image a better way to form the contact of Soga without using bending tools.

Regarding claims 8 and 14 Soga discloses that said second portion is bent perpendicularly relative to said first portion (fig. 2).

Regarding claims 9 and 15 Soga discloses that a length dimension of said terminal portion relative to said board is adjusted by moving said fulcrum at said joining

portion between said first and third portions in a direction toward said insulator upon bending said third portion (fig. 2).

Regarding claim 18 Soga discloses that said one-side surface of said insulator is formed with a projection (30b) in the neighborhood of said first portion on a side near said one surface of said board and said first portion is bent along said projection in a direction to approach the board (fig. 2).

***Allowable Subject Matter***

8. Claims 6, 10-11, 13, 16-17 and, 19 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: In combination with claim 3 the side surface of the insulator formed with a cutout near the first portion on a side near the board with the cutout formed by cutting a portion of the insulator into an arc or inclined surface. With regards to the other claims objected to because they depend from a rejected claim, they recite various details of the method of forming which neither of the cited references get into.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Zarroli whose telephone number is 571-272-2101. The examiner can normally be reached on 7:30 to 3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Feild can be reached on (571) 272-2800 ext 39. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael C. Zarroli  
Primary Examiner  
Art Unit 2839

MCZ  
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